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# Valvular Heart Disease

## LONG TERM OUTCOMES: TRANSCATHETER AORTIC VALVE IMPLANTATION FOR SEVERE AORTIC STENOSIS IN THE HIGH RISK POPULATION. FOLLOW UP TO FOUR YEARS

ACC Moderated Poster Contributions
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Session Title: TAVR: Real World Outcomes and Potential Complications
Abstract Category: 11. Valvular Heart Disease: Therapy
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**Background:** There is growing evidence for Trans-catheter Aortic Valve Implantation (TAVI) in the high-risk population with severe symptomatic aortic stenosis; the majority of which is derived from early clinical outcome data with little in the way of long-term follow up. We aim to present long-term outcome data at 4-year follow-up in patients who underwent TAVI procedure in the United Kingdom (UK).

**Method:** We extracted data from the UK TAVI Registry incorporating a combined dataset from two UK institutions. This was an all-inclusive prospective data collection, irrespective of access site, valve selection or technology. The data was collected in 36 patients who underwent 36 TAVI procedures up to and including November 2007. Mortality tracking was achieved in 100% of patients.

**Results:** 36 patients had an average age of 85±5.2 years, 18/36 (50%) were male, with peak aortic valve gradient: 77±25 mmHg and an average logistic EuroScore of 24.7±15.0. 6/36 (16.7%) had undergone previous cardiac surgery with 15/36 (41.7%) having pre-existing coronary artery disease. Survival at 30 days was 92.7%, 64% at 1 year, and 44% at 4-year follow-up with no significant functional prosthesis deterioration in these patients.

**Conclusions:** TAVI outcomes data yields positive results with 44% 4 year survival, however with a marked decline in survival in the first year.

Figure 1. Baseline Characteristics and Survival

| Variable | N=36 |
|---|---|
| Age (years) | 85±5.2 |
| Sex (male) | 18/36 (50%) |
| Peak Aortic Valve gradient (mmHg) | 77±25 |
| NYHA | II-IV (2.4±0.5) |
| Log. EuroScore | 24.7±15.0 |
| Coronary Artery Disease | 15/36 (41.7%) |
| Previous Cardiac Surgery | 6/36 (16.7%) |
| Survival: | |
| 30 days | 33/36 (92.7%) |
| 1 year | 23/36 (64%) |
| 2 years | 22/36 (61.2%) |
| 4 years/total | 16/36 (44%) |

Values: n/N (%), mean±sd